DOCUMENT RESUME

ED 153 487 FL 009 414

AUTHOR Santiago, Milagros J.; de Guzman, Estefania S.
TITLE A Child's Step Forward in Reading. The Effect of Language of Material and Other Factors on Reading Comprehension among Grade Four Pupils. Philippine Normal College Research Series No. 3.
INSTITUTION Philippine Normal Coll., Manila.
PUB DATE 77
NOTE 28p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Bilingual Education; Bilingualism; Educational Research; Elementary Education; Elementary School Students; English; Grade 4; Indonesian Languages; *Language of Instruction; *Language Proficiency; Language Research; *Reading Comprehension; Reading Instruction; *Reading Materials; Reading Research; Reading Skills; Scores; Student Ability; Student Characteristics; Testing
IDENTIFIERS Philippines; *Pilipino

ABSTRACT

Sixty grade four pupils of the Philippine Normal College Laboratory were involved in a study to determine the effect of language of material, type of material, and ability level on their reading comprehension. The materials were either unilingual English (E/E), unilingual Pilipino (P/P), or consisted of a text in English followed by questions in Pilipino, (E/P), or vice versa (P/E). The materials were either "Work" or "recreatory" types of materials. The students were identified as being of fast, average, or slow ability. Four selections of work materials and four of recreation materials were each randomly presented in four formats. An analysis of variance with repeated measures on type and language of the materials was used to analyze pupils' scores on the comprehension tests given after they had gone over each of the eight selections. The reading comprehension of the pupils varied as a function of the language of the material, with the unilingual P/P being the easiest, followed by E/P, E/E, and P/E. Student ability was also found to be a factor in performance in the four language stiuations. In addition, recreation materials were found to be easier than the work materials. (Author/AM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED153487

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M.J. Santiago

E.S. de Guzman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Philippine Normal College
Research Series No. 3

A Child's Step Forward in Reading

The Effect of Language of Material and Other Factors on Reading Comprehension Among Grade Four Pupils

Milagros J. Santiago
Estefania S. de Guzman

1977

FL009414

A CHILD'S STEP FORWARD IN READING

ABSTRACT

Sixty grade four pupils of the Philippine Normal College Laboratory Elementary School were involved in a study to determine the effect of language of material — unilingual, where both selections and questions were in English (E/E), or both in Pilipino (P/P), or the selections were in English and the questions in Pilipino (E/P), or the selections were in Pilipino and the questions in English (P/E) —, type of material (work type and recreatory type), and ability level (fast, average, and slow) on their reading comprehension. There were four work-type and four recreatory-type materials, each of which was randomly presented in four different formats of language of material. A $3 \times \overline{\lceil 2 \times 4 \rceil}$ analysis of variance with repeated measures on type and language of the material was used to analyze the pupils' scores on the comprehension tests given after they had gone over each of the eight selections.

The reading comprehension of the pupils varied as a function of the language of the material, with the unilingual P/P revealed to be the easiest, followed by E/P, E/E, and P/E. Likewise, the pupils as three ability groups performed differently in the four language situations. The subjects were also found to perform better with recreatory-type materials.

This study could help explore another instructional procedure in Reading which would utilize bilingual English/Filipino materials, especially among average pupils, before proceeding to present them with unilingual English/English materials.

A CHILD'S STEP FORWARD IN READING

THE EFFECT OF LANGUAGE OF MATERIAL AND OTHER FACTORS ON READING COMPREHENSION AMONG GRADE FOUR PUPILS

By

MILAGROS J. SANTIAGO[1]
and
ESTEFANIA S. DE GUZMAN

Introduction

As a subject, Reading permeates practically all the other subjects in the school curriculum. Yet the reading ability of public elementary school children in the Philippines has been found to fall continually short of their actual grade level even as they progress from one grade to another (Catarata, 1972; Viloria, 1971; Jalosjos, 1966).

Continuing research has shown that, among others, the significant variables that affect reading comprehension are intelligence (Chester, 1974) and the reading material itself, viz., its content and design (Javier, 1974; Ibañez, 1971; Sister Mongey, 1969), and an aspect of the language used, i.e., its syntactical structure (Fox, 1976; Tatham, 1970; Strickland, 1962; as cited by Chester, 1974; Zeman, 1969; as quoted by Porter, 1974; Beilin and Spontak, 1969; Slobin, 1966; as cited by Kennedy, 1972).

Researches in Reading have served as components of bilingual education projects. In the United States, both English and the native language of the immigrants are used as media of instruction in part or for all subjects in the school curriculum except in teaching the language itself, the extent of use being dependent on the type and model of the bilingual education program adopted by the school (Cohen, 1975; Fishman and Lovas, 1971). The alternate day scheme for English and Spanish which the Redwood City Experiment uses (Cohen, 1975), the half-day scheme

for each language adopted in Coral Way, Florida and Laredo, Texas (Fishman and Lovas, 1971; Gaarder, 1972; Spolsky, 1971), and the free language alternation approach practiced in the John F. Kennedy School in Berlin, Germany (Mackey, 1969) may be cited for their success in assisting children learn almost equally well through two languages.

In the Philippine setting, however, the concept of bilingual education differs, since it calls for the separate use of Filipino and English in definite subject areas. Thus, in the present set-up, teaching Reading in English is conducted in a unilingual English situation.

The present research aims to explore the possibility of using bilingual materials in Reading instruction for elementary grades pupils. It is expected that the bilingual reading materials written in the mother tongue and in the language to be learned — in this case, English — will possibly bridge the achievement gap by effecting easier reading in English than when the entire material used is in the second language alone. Consequently, the children may experience earlier success in reading the second language, as they have been gradually introduced to unilingual English materials, with Filipino serving as the auxiliary medium through the question asked.

This expectation appears relevant in the light of what Torrey stated with reference to the teaching of English to pupils who are environmentally handicapped and have a foreign cultural background:

> It is being seriously proposed by many today (e.g., Anderson, 1965; Gaarder, 1965; Boyer, 1965) that school instruction should always begin in the mother tongue with the second language introduced only gradually and with instruction by means of it waiting upon the mastery of the specific words and structures needed. An important part of the rationale for these suggestions is that reading is only one manifestation of basic linguistic competence and not normally a primary one. Much effective reading training builds upon previous knowledge of language structures. (Torrey, 1971: 256)

Bell (1965) emphasizes that reading the second language does not necessarily have to wait until full mastery

of the spoken forms is attained; rather, the linguistic competence of the child should fit the particular material to be read (cited by Torrey, 1971). As Fr. Llamzon puts it· "the best way to have a good grasp of a language is to learn how to speak it." And this is true even if the objective is only to be able to read the literature of the foreign language (Llamzon, 1970: 15-16).

In summarizing such policy for non-English speaking children, King (1967) is of the belief that simultaneous instruction of the child both in his native language and in English should be given him to reinforce what he already knows in his native language and to provide him with more opportunities for transfer of learning from the first to the second language. This transfer of learning is facilitated especially when both languages share many common characteristics, for thereby it allows for a good performance in the second language as compared to that in the mother language (Dizon, 1975).

In a sense, the present investigation bears resemblance to that of Cabañero (1972). Her study shows that information acquisition of college students is most effective when the lecture is in Pilipino while the test is in English; *per contra*, acquisition is least effective when the lecture is in English while the test is in Pilipino. The unilingual conditions for Pilipino and English are second and third, respectively, in the ranking of effectiveness as regards the said task.

The Problem

The present study attempts to find out how language of material, type of material, and ability level affect the reading comprehension of grade four pupils.

Specifically, it seeks to analyze the performance of pupils in making inferences with-regard to:

1. Language of Stimuli
   a. English Selection/English Questions (E/E)
   b. English Selection/Pilipino Questions (E/P)
   c. Pilipino Selection/English Questions (P/E)
   d. Pilipino Selection/Pilipino Questions (P/P)

2. Type of Material
   a. Work Type
   b. Recreatory Type
3. Ability Level
   a. Fast Group
   b. Average Group
   c. Slow Group

Method

Sample

Sixty grade four pupils of the Philippine Normal College Laboratory Elementary School for the School Year 1975-1976 constituted the subjects of the research. The subjects, 20 for each ability level — namely: Fast, Average, and Slow Groups — were selected from four homogeneously grouped grade four classes. Test results from the *Otis-Lennon Mental Ability Test Elementary II (Tagalog Version)*, *Standardized Reading for Grade Four by* E. Claveria, *Istandardisasyong Pagsusulit sa Pilipino para sa Intermedya (Porma A)* by L. Buenavista, E. Cañete, and M. Luntao, and the ratings of the classes for the Third Quarter, School Year 1975-1976, in Reading and Pagbasa helped facilitate the classification. Thirty-seven boys and 23 girls were involved in the study; all of them spoke Pilipino (Tagalog) as their first language.

Stimulus Materials

Four work-type and four recreatory-type materials were developed for the study, the former being those that the pupils were asked to read to gather information and master ideas (Good, 1973), while the latter were those they were told to read for enjoyment. Five of these materials were original and the rest were adapted. Each reading material was written in two versions, English and Pilipino, thus providing a total of 16 selections. Both English and Pilipino references were utilized in writing the original materials and their Pilipino (or English) translation. Variety and suitability for the grade level were considered in the preparation of the materials.

Indicated below are the titles of the selections, given

in both the English and Pilipino versions, and a brief description of each.

Work-type Materials

English	*Pilipino*
1. Misa de Gallo[2] Celebration of the "misa de gallo" and its origin	1. Simbang Gabi
2. A Strange Insect[3] A description of the spider and how it catches its food	2. Isang Kakaibang Kulisap
3. Cotton[3] The steps followed in the production of cotton	3. Bulak
4. Wind Characteristics of the wind and its relation to weather	4. Hangin[4]

Recreatory-Type Materials

English	*Pilipino*
1. The First Discovery[4] Galileo's first discovery which deals with the swinging movement of the chandelier	1. Ang Unang Pagtuklas
2. The Two Fairies[4] The clever way devised by Father to help his son Bimbong replace Mother's broken flower pot	2. Ang Dalawang Engkantada
3. Nena's Kitten[4] A girl's love for her kitten and the subsequent death of her pet	3. Ang Pusa ni Nena[5]
4. A Tale of Two Books Lives led by the two books *Bumasa at Magsaray* and *Halina't Magmasid* with their respective boy-owners	4. Isang Kuwento ng Dalawang Aklat[6]

A five-item multiple choice test on making inferences was constructed to evaluate comprehension of each selection read. The test items were given in English and in Pilipino.

Try-outs were done among pupils in the Gotamco Elementary School, Pasay City[7] and among members of the population involved in the study to evaluate the vocabulary and content of the materials thus constructed.

Revisions were made based on the results of the try-outs and on the evaluation performed by the Bureau of Public Schools (BPS)[8] — Philippine Normal College (PNC) Reading scholars for the School Year 1975-1976.[9]

Administration of Materials

The stimulus materials were administered to the subjects during their respective Reading classes. Arrangements were so made that the order of presentation could be randomly done. (The abbreviations given to the titles of the selections are indicated on Table I.) Each subject was asked to draw lot before reading the first selection, to determine which version of the questions would be answered first, that is, English or Pilipino. Thus, if it was English, the number 1 was written and encircled on the answer sheet after the word English. As soon as each pupil was through reading, the first version of the questions to be answered was given to him, followed by the other version. The same procedure was observed for the second selection. No time limit was given either for reading the selection or answering the questions.

As shown in Table I, only two selections of the same type and language were administered during each session. The 16 selections, English and Pilipino versions, were presented to subjects in eight sessions for eight consecutive days exclusive of Saturdays and Sundays. Similarly, the recreatory-type and work-type materials were evenly distributed in point of day of presentation.

Data Analysis

The scores of the pupils on the eight comprehension tests (two in Pilipino and two in English, for each type of material — recreatory and work) were subjected to a $3 \times \overline{\lceil 2 \times 4 \rceil}$ analysis of variance with repeated measures on the type and language of material employed. Comparisons between pairs of means were done through posteriori t-tests.

TABLE I
SCHEDULE OF ADMINISTRATION OF READING MATERIALS

Day	*Fast Pupils*	*Average Pupils*	*Slow Pupils*
1	Wind (WW)*	Simbang Gabi (WSG)	Ang Unang Pagka-tuklas (RUP)
	Misa de Gallo (WMG)	Bulak (WB)	Ang Pusa ni Nena (RPN)
2	Ang Pusa ni Nena (RPN)	Nena's Kitten (RNK)	Hangin (WH)
	Ang Unang Pagka-tuklas (RUP)	The First Disco-very (RFD)	Bulak (WB)
3	Hangin (WH)	Ang Unang Pagka-tuklas (RUP)	Cotton (WC)
	Simbang Gabi (WSG)	Ang Pusa ni Nena (RPN)	Wind (WW)
4	Nena's Kitten (RNK)	Misa de Gallo (WMG)	Nena's Kitten (RNK)
	The First Disco-very (RFD)	Cotton (WC)	The First Disco-very (RFD)
5	A Tale of Two Books (RTTB)	A Strange Insect (WSI)	A Tale of Two Books (RTTB)
	Two Fairies (RTF)	Wind (WW)	Two Fairies (RTF)
6	Isang Kakaibang Kulisap (WKK)	Isang Kuwento ng Dalawang Aklat (RKDA)	Misa de Gallo (WMG)
	Bulak (WB)	Dalawang Engkantada (RDE)	A Strange Insect (WSI)
7	Isang Kuwento ng Dalawang Aklat (RKDA)	Isang Kakaibang Kulisap (WKK)	Isang Kuwento ng Dalawang Aklat (RKDA)
	Dalawang Engkan-tada (RDE)	Hangin (WH)	Dalawang Eng-kantada (RDE)
8	A Strange Insect (WSI)	Two Fairies (RTF)	Simbang Gabi (WSG)
	Cotton (WB)	A Tale of Two Books (RTTB)	Isang Kakaibang Kulisap (WKK)

* The first letter refers to the type of material: Recreatory (R) or Work (W). The succeeding letter or letters indicate the first letter of each important word in the title of the selections made.

Results and Discussion

A. *Language of Material*

The analysis of variance, as summarized in Table II, yielded a significant main effect for language of materials ($F = 5.93$, df = 3/171, p is less than .01). As shown by the means in Table III, the subjects in general performed best in the P/P unilingual situation. The obtained mean of 10.28 was significantly found higher than the three other levels of language of material ($t = 2.2$; $t = 3.5$; $t = 3.86$, 171 df) at the .05 level of confidence. The differences pairwise between means of the bilingual E/P ($\overline{X} = 9.78$), E/E ($\overline{X} = 9.5$), and P/E ($\overline{X} = 9.42$) were not found to be significant ($t = 1.96$; $t = .36$, 171 df).

TABLE II
SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE OF READING PERFORMANCES

Source of Variation	SS	DF	MS	F	P
Between Subjects	4,155.992	59			
(A) Mental Ability	3,248.867	2	1,612.43	107.49	less than .01
Subjects Within Groups	871.125	57	15.28		
Within Subjects	1,721.000	420			
(B) Type of Materials	190.009	1	190.009	28.89	less than .01
A x B	19.716	2	9.858	1.55	n. s.
B x Subjects Within Groups	362.275	57	6.356		
(C) Language of Materials	53.375	3	17.792	5.93	less than .01
A x C	38.050	6	6.342	2.11	less than .10
C x Subjects Within Groups	512.575	171	2.998		
B x C	3.641	3	1.213	.39	n. s.
A x B x C	14.934	6	2.489	.81	n. s.
BC x Subjects Within Groups	526.425	171	3.079		
Total	5,876.922	479			

TABLE III
MEAN SCORES BY ABILITY, TYPE OF MATERIALS AND LANGUAGE OF MATERIALS

Ability	Type of Material	Language of Material E/E	E/P	P/P	P/E	$\overline{X}_{TM}$	
Fast	Recreatory	13.85	13.7	13.5	13.4	13.61	$\overline{X}_F = 13.03$
	Work	12.7	12.8	12.5	11.85	12.46	
Average	Recreatory	9.85	10.65	11.0	10.35	10.46	$\overline{X}_A = 9.56$
	Work	8.05	8.45	9.7	8.45	8.66	
Slow	Recreatory	7.0	6.55	8.05	6.6	7.05	$\overline{X}_S = 6.65$
	Work	5.65	6.55	6.9	5.9	6.25	
	$\overline{X}_{LM}$	9.5	9.78	10.28	9.42		

showing better reading performance of pupils in Pilipino than in English, which was attributed largely to familiarity with the mother language (Monserrate, 1973; Aliazas, 1973).

1. Language Proficiency

An interaction, although not so significantly marked, between language of material and mental ability was observed. This was found significant only at the .10 level of significance. To detect possible sources of this interaction, performance of the three ability groups in the different levels of language of material was further investigated. Responses to the E/E and E/P materials were categorized as English, those to the P/P and P/E materials as Pilipino. The results are summarized in Table IV-A.

The fast group performed better when the material was in English ($t = 2.11$, p is less than .05). The average group obtained a significant t-value, too ($t = 2.33$, p is less than .05). However, this time the results were in favor of Pilipino materials. The slow group tended to follow a pattern similar to that of the average group, although it failed to reach the statistical requirement level.

TABLE IV - A
COMBINED MEANS BY ABILITY GROUP ON ENGLISH (E/E AND E/P) AND PILIPINO (P/P AND P/E) MATERIALS AND OBTAINED t-VALUES

Ability Level	English Materials	Pilipino Materials	t
Fast	13.39	12.82	2.11*
Average	9.25	9.88	2.33*
Slow	6.14	6.87	1.59

*p is less than .05

The difference was only significant at the .20 level. It may only be gleaned, then, that so far as ability is concerned, the less able group performed better with reading materials written in Pilipino (represented by the P/P and P/E stimulus materials).

Another possible source of interaction between language of material and mental abiiity was, likewise, indicated in the significant differences in the performance of the average and slow pupils using unilingual E/E and P/P materials. The obtained t-values of 3.59 and 2.95 (p is less than .01), respectively, show that both groups of pupils performed better in unilingual Pilipino than in other materials. No significant difference was manifested by the fast group in the two sets of unilingual material (Table IV-B).

TABLE IV-B
MEANS BY ABILITY AND LANGUAGE OF UNILINGUAL MATERIALS AND OBTAINED t-VALUES

Ability Level	Language of Material		t
	E/E	P/P	
Fast	13.28	13.0	.72
Average	8.95	10.35	3.59*
Slow	6.32	7.48	2.95*

* p is less than .01

This trend, however, did not show up in the bilingual materials, as seen in Table IV-C. The three ability groups did not manifest marked differences in reading E/P and P/E materials (t = 1.59; t = 38; t = .77, respectively) although better comprehension was apparently indicated in favor of the E/P materials.

TABLE IV-C
MEANS BY ABILITY AND LANGUAGE OF BILINGUAL MATERIALS AND OBTAINED t-VALUES

Ability Level	Language of Material		t
	E/P	P/E	
Fast	13.25	12.63	1.59
Average	9.55	9.4	.38
Slow	6.55	6.25	.77

Several factors may be taken into account to explain the above mentioned findings. Firstly, the characteristics of the three groups may be one. The homogeneous grouping of the children in the fast group could have fostered keen competition among its members and probably motivated them to put more emphasis on English — a novel thing — than on Pilipino — with which they were familiar, anyway — in their learning activities. The influence that attitudes exert on learning in Reading is well known (Noland and Craft, 1976; Shapiro and Kriftcher, 1976). In this case, the children in the fast group strived for academic success and they knew that mastery of the English language could assist them in attaining their goal. On the part of the average group, the motivation was not so much; even less so with the slow group.

Secondly, a provision for more activities done in English, e.g., listening, reading, oral and written communication could, presumably, have been encouraged by more parents of children in the fast group and accepted by these children than those in the average and slow groups. The slow pupils could, probably, have concentrated most of

their time on activities employing Pilipino since this is the language they are most at home with. On their part, the average group seem to have found time to carry out activities in English but confined mostly to those which they particularly enjoyed and found success in doing.

Another strong factor that could be considered, and which may have been the outcome of the two factors earlier cited, is the level of the general language ability manifested by the pupils during their classes. Those in the fast group demonstrated sufficient mastery of the English language at their particular grade level, as evidenced by their performance in listening activities, speech, and written work. In the case of the average and slow groups, performance in these aspects was not as well, with the slow group exhibiting least ability as regards general knowledge of the English language. These seem to indicate that there is a significant relation between general knowledge of the language and the level of reading comprehension in that language among grade four pupils.

Other researches similarly point out the same conclusion regarding significant correlation between general knowledge of the language and reading comprehension (Brittain, 1970; cited by Fox, 1976; certain New Zealand research studies, cited by Clay, 1976; Zeman, 1969; as quoted by Porter, 1974; Tatham, 1970; and O'Donnel, 1963, as quoted by Harris, 1963.) As revealed in Loban's longitudinal study (1963) beginning with kindergarten and ending with grade six, children who ranked high in general language ability also ranked high in reading, and contrariwise (cited by Fox, 1976).

2. Bilingualism

The table of means, likewise, indicates that the average pupils appear to comprehend better the bilingual E/P materials as compared to the unilingual E/E materials. With respect to the recreatory type for slow pupils, a slight difference in favor of E/E was noted. It could be inferred, then, that the bilingual aspect of learning facilitated the children's understanding of the materials.

The use of Pilipino in the questions asked probably assisted the pupils in understanding better the reading materials given in English. Presumably, Pilipino which is their mother tongue served as an auxiliary propulsion towards effecting better comprehension of the materials given in the second language which is English.

This finding appears related to the concept of bilingual education undertaken as projects in the United States wherein two languages are used as media of instruction among a group of children whether in a part or in the entirety of the school curriculum. The extent of use of the two languages varies depending on the type of program and model adopted. Despite the variations, the bilingual education projects — several of them being mentioned in the introduction — which utilized both the native language and English, the latter as target language, similarly produced bilingual proficiency among the students (Mackey, 1969; Cohen, 1975; Spolsky, 1971).

Furthermore, the results which somehow lend support to the use of bilingual materials for average pupils appear to confirm what Torrey (1971) and King (1967) have earlier cited with reference to the teaching of English to non-English speaking children: that the mother language should be used at the start of the school instruction accompanied by the gradual introduction of the second language, the use of the latter in instruction being dependent on the mastery of specific vocabulary and structures needed. Consequently, more opportunities could be provided for transfer of learning from the first to the second language.

The foregoing considerations possibly relate to the Philippine setting; they indicate the use of bilingual E/P materials among average pupils as an aid to increase their level of reading comprehension in English.

B. *Type of Material*

Type of material as a source of variation, likewise, registered a significant main effect ($F = 28.89$, $df = 1/57$, p is less than .01). The pupils were generally found to perform better with recreatory-type than with work-type ma-

terials. Further analysis, however, through the use of the posteriori t-test, showed that in the case of the fast and slow ability groups, no significant difference was found between their respective reading comprehensions in the two types of materials. It is only with respect to the average ability group that a significant difference was found in favor of the recreatory type of material. The computed t-value of 2.27, df = 57, is significant at the .05 level (Table IV-D).

TABLE IV - D
MEANS BY ABILITY AND TYPE OF MATERIALS AND OBTAINED t-VALUES

Ability Level	Type of Material		t
	Recreatory	Work	
Fast	13.61	12.46	1.45 n.s.
Average	10.46	8.66	2.27*
Slow	7.05	6.25	1.01 n.s.

* p is less than .05

The data suggest that, in general, pupils understood better the recreatory type than the work type of materials. This finding seems related to that of Ibañez (1971) wherein questions on Science materials proved to be more difficult than the story type and Social Studies materials. Science materials can be regarded as work-type materials, too, since they are aimed more at providing information than at stimulating enjoyment in reading.

The finding may be attributed to the general appeal that stories have for children, more especially because the recreatory-type materials used in this investigation include children for their main characters in situations that relate to the pupils' experiential background. They are also classified as stories of human characters and animals which, as reported by Norvell (1959), are preferred, among others, by grades four to six children (cited by Smith, 1963).

Stories included in this study are also geared toward helping children "grasp relationships and classify concepts concerning everyday living."

C. *Ability Level*

The analysis also yielded significant main effect for ability level, as indicated by the obtained F-ratio of 107.49 which is very much greater than 4.98, the required value of F for 2/57 degrees of freedom. This shows that there is a very significant difference in the reading comprehension of the fast, average, and slow groups of grade four pupils in the three ability groups, performed in accordance with their respective ability group. The obtained t-values presented in Table IV-E are all significant beyond the .01 level. These data point out that, regardless of the type of material used, the same trend emerged, i.e., the fast group was consistently the highest in point of comprehension, and the slow group, the lowest, among the three groups of subjects. This finding correlates with that of Ibañez (1971).

TABLE IV-E
t-VALUES OBTAINED IN COMPARING MEANS BY ABILITY AND TYPE OF MATERIALS*

	Average		Slow	
	Work Type	Recreatory Type	Work Type	Recreatory Type
High	4.8	3.98	7.86	8.30
Average			3.05	4.31

* All t-values obtained were significant at the .01 level.

At this point it may be worthwhile to note that as Chester has observed, "the relationship between IQ and reading achievement has continuously intrigued researchers for forty years"; this fact notwithstanding, the finding that

group intelligence tests often classify normal or bright children as dull as a result of their poor reading ability (Durrell, 1933) has not changed significantly even after several hundred studies (Chester, 1974).

Summary Statements

1. Language of material affects the reading comprehension of the grade four pupils. They perform best when the materials are unilingual P/P (Pilipino selection and Pilipino questions). This performance is followed in degree by those using bilingual E/P (English selection and Pilipino questions), unilingual E/E (English selection and English questions), and bilingual P/E (Pilipino selection and English questions).
2. Reading comprehension of the different ability groups is related to the language of the stimulus material. Pupils belonging to the fast group perform better when the materials are in English, while those who belong to the average and slow groups comprehend better when the materials are in Pilipino.
3. Bilingual E/P materials seem to elicit better performance as compared to E/E materials in the average group of pupils.
4. Generally, the pupils comprehend better when the materials are of the recreatory type than of the work type.
5. The ability level of the pupils is related to their performance in the two types of materials. Whereas the reading comprehension of the fast and slow groups of pupils is not affected by the type of material, the average group comprehends better the recreatory type.
6. The reading comprehension of the pupils is affected by their ability level. The performance of the pupils belonging to the fast, average, and slow groups corresponds with their respective ability group, on both types of materials in the four language situations.

Recommendations

1. Since the use of bilingual E/P reading materials shows indications of producing better performance as compared to that of the unilingual E/E reading materials among the pupils in the average group, their effectiveness in improving reading comprehension in English could be explored.
2. For a more intensive study of the average pupils' responses to bilingual reading materials, more significant data could possibly be obtained if further studies to be undertaken would consider the following variables:
   a. grade level (primary and intermediate)
   b. locale (urban and rural)
   c. linguistic background (Tagalog and non-Tagalog speakers)
   d. socio-economic status (upper income group, average income group, and lower income group)

   Instead of having the same set of subjects themselves as the control, the studies may be so designed that a counterbalanced order will be utilized in the presentation of the materials to the control group and the treatment (or experimental) groups. Similarly, the bilingual material may be English with Filipino or the language in the particular locale, in order to explore how well non-Tagalog children would respond to these language combinations of reading materials.
3. Further studies may be conducted to verify if pupils in a fast ability group really comprehend better in English than in Filipino, as revealed in this study.
4. More opportunities for children to improve their general knowledge of the English language, especially in oral communication, should be provided as an aid in improving their reading comprehension in English.
5. The instruments used in the present study have their own limitations or shortcomings due to the limited time within which the research was undertaken. For more effective use by other researchers, these instruments could be improved.
6. Efforts could be directed toward having work type

reading materials highly appealing to children by making them as varied and interesting as possible. The significance of this type of material should, moreover, be underscored. Toward this end, the help of writers of children's books could be solicited.

NOTES

1. The study was undertaken by a group of faculty members of the Philippine Normal College Laboratory Elementary School, Department of Student Teaching; the Research Committee being composed of the following: Miss Milagros J. Santiago, Coordinator; Mrs. Estefania S. de Guzman, Mrs. Marietta R. Otero, and Mrs. Edita C. Monserrate, Members. Advisers were: Prof. Araceli M. Villamin, Reading Center, and Prof. Alfonso O. Santiago, Graduate School, Philippine Normal College.
2. Adapted.
3. Written by Edita C. Monserrate.
4. Adapted or translated by Marietta R. Otero.
5. Written by Alfonso O. Santiago.
6. The other selections were written, adapted, and/or translated by Milagros J. Santiago.
7. This was done through the assistance of Mr. Rogelio Abao, a BPS-PNC Reading scholar.
8. The Bureau of Public Schools was abolished July 1, 1975. The scholars are more properly from the Department of Education and Culture.
9. The finished materials were edited by Prof. Araceli M. Villamin and Prof. Alfonso O. Santiago, Advisers of this research.

BIBLIOGRAPHY

Adre, Maria de Sta. Margarita, Sister. "An Evaluation of the Science Research Associates Reading Laboratory II as a Supplement to the Basal Reading Program in Grade Four." Unpublished Master's thesis, Ateneo de Manila University, Quezon City, 1970.

Aliazas, Amparo B. "The Oral Response to a Word Association Task and the Reading Abilities of Grades One and Three in Pilipino and in English." Unpublished Master's thesis, Philippine Normal College, Manila, 1973.

Austria, Jimena. "Maligayang Pasko," *Philippines Quarterly*, 5, 4, Dec. 1973.

Buenavista, L., E. Cañete at M. Luntao. "Isang Istandardisadong Pagsusulit sa Pagbasa sa Pilipino Para sa Intermedya." Tanging Proyekto, Dalubhasaang Normal ng Pilipinas, Maynila, 1974.

Cabañero, Cecilia A. "Ang Epekto ng Wikang Ginamit sa Pagkamit ng Impormasyon," *Dyornal ng Malawakang Edukasyon, Pananaliksik sa Sikolohiya.* Unibersidad ng Pilipinas, Kolehiyo ng Sining at Agham. Ikalawang Semestre, Taon 1971-1972.

Catarata, Evangelina G. "A Survey of the Speed in Silent Reading and of Some Comprehension Skills of Grade Four Pupils in the District of Bogo, 1971-1972." Unpublished Master's thesis, University of the Visayas, Cebu City, 1972.

Dizon, Dorothy C. "The Oral Vocabulary in Pampango, Pilipino, and English of Grade One Pupils in Pampanga." Unpublished Special Project, Philippine Normal College, Manila, 1975.

Chester, Robert D. "The Psychology of Reading," *The Journal of Educational Research*, 67, May-June 1974.

Claveria, Ermelinda Q. "A Standardized Reading Test for Grade Four." Unpublished Master's thesis, Philippine Normal College, Manila, 1974.

Clay, Marie, "Early Childhood and Cultural Diversity in New Zealand." *The Reading Teacher*, 29, Jan. 1976.

Cohen, Andrew D. *A Sociolinguistic Approach to Bilingual Education.* Massachusetts: Newbury House Publishers, Inc., 1975.

Department of Education and Culture. Department Order No. 25, s. 1974, "Implementing Guidelines for the Policy on Bilin-

gual Education." Manila: Department of Education and Culture, June 19, 1974.

Fabia, Melina T. "Kaugnayan ng Uri ng mga Tanong at Ibang mga Salik sa Bilis at Pag-unawa sa Pagbasang Tahimik ng mga Mag-aaral sa Ikalima at Ikaanim na Baitang." Di nalathalang tesis sa M.A. Dalubhasaang Normal ng Pilipinas, Maynila, 1974.

Fishman, Joshua A., Robert L. Cooper, Roxana Ma, *et al.*, (eds.) *Bilingualism in the Barrio.* Indiana University Publications, Language Science Monograph Vol. 7. The Hague, Netherlands: Mouton and Co., 1971.

Fishman, Joshua and John Lovas, "Bilingual Education in Sociolinguistic Perspective." In Bernard Spolsky (ed.). *The Language Education for Minority Children.* Massachusetts: Newbury House Publishers, Inc., 1972.

Fox, Sharon E. "Assisting Children's Language Development." *The Reading Teacher,* 29, April 1976.

Gaarder, A. Bruce. "Bilingualism and Education." In Bernard Spolsky (ed.). *The Language Education of Minority Children.* Massachusetts: Newbury House Publishers, Inc., 1972.

Good, Carter V. and Winifred R. Merkel (eds.) *Dictionary of Education* (3rd ed.). New York: McGraw-Hill Book Co., 1973.

Harris, James A. "Bilingual-Multicultural Education," *Today's Education,* 64, Jan - Feb. 1975.

Harris, Theodore L. "Summary of Investigations Relating to Reading: July 1, 1961-June 30, 1962," *Journal of Educational Research,* 56, Feb. 1963.

Ibañez, Josefina L. "An Analysis of the Responses of Upper Elementary Pupils to Comprehension Questions Before and After Reading a Selection." Unpublished Master's thesis, Philippine Normal College, Manila, 1971.

Jalosjos, Alita B. "An Analysis of the Reading Comprehension and Vocabulary in the Fourth to Sixth Grade of the Eight Public Elementary Schools of Sindangan, Zamboanga del Norte." Unpublished Master's thesis, University of San Carlos, Cebu City, 1966.

Javier, Lourdes. "A Study of the Effects of the Experimental Multi-Level Instructional Materials on the Reading Vocabulary and Comprehension of Grade Five Pupils of Assumption Grade School in San Fernando, Pampanga." Unpublished

Master's thesis, Ateneo de Manila University, Quezon City, 1974.

Kaiser, Robert A., C. F. Neids and B. P. Floriami. "Syntactic Complexity of Primary Grades Reading Materials: A Preliminary Look," *The Reading Teacher*, 28, Dec. 1975.

Kennedy, Graeme. "The Language of Tests for Young Children." In Bernard Spolsky (ed.). *The Language Education of Minority Children. Selected Readings*. Massachusetts: Newbury House Publishers, Inc., 1972.

Kvaraceus, William C. "Reading: Failure and Delinquency," *Today's Education*, 60, Oct. 1971.

Llamzon, Teodoro A., Fr. *A Handbook for Second Language Teaching*. Manila: Ateneo University Press and JMC Press, Inc., 1970.

Lytton, Edward Bulwer. "The Broken Flower Pot." *The Boys' and Girls' Readers*, 1932.

Mackey, William F. *Bilingual Education in a Binational School*. Rowley: Massachusetts: Newbury House Publishers, 1969.

Marks, Carolyn B., M. J. and M. C. Wittrock. "Word Frequency and Reading Comprehension," *The Journal of Educational Research*, 67, Feb. 1974.

Mongey, Mary Mechtilde, Sister. "A Study of the Comparative Effectiveness of SRA Reading Laboratories with Fifth Grade Provincial Pupils of Initially High, Average, and Low Reading Ability." Unpublished Master's thesis, De La Salle College, Manila, 1969.

Monserrate, Edita C. "Retelling of Child-Told and Adult-Told Selections in English and Pilipino Among Ten-Year-Olds." Unpublished Master's thesis, Philippine Normal College, Manila, 1973.

Noland, Roland and Lynda H. Craft. "Methods to Motivate the Reluctant Reader," *Journal of Reading*, 9, Feb. 1976.

Philippine Guidance and Personnel Association. Asia Foundation. "Pag-aangkop sa Pilipino ng Pagsusulit sa Kakayahang Pangkaisipang 'Otis Lennon' Porma 'J' Antas Elementary II." Maynila, 1971.

Porter, Jane. "Research Report," *Elementary English*. Feb. 1974

Power, Rhoda. "He Was Disgraced for Telling the Truth," *The Bookshelf for Boys and Girls*, 9, New York: Educational Publishers, 1963.

Reed, Carroll E. (ed.). *The Learning of Language*. New York:

Appleton Century-Crofts, Meredith Corporation, 1971.

Santiago, Alfonso O. "Ang Pusa ni Nena." Unpublished story, n.d.

Santiago, Milagros J. "Isang Kuwento ng Dalawang Aklat," *Pilipino*, 10:5, Nob. 1975

Shapiro, Nathaniel and Kriftcher, Neel. "Combating the Lower and Higher Illiteracies," *Journal of Reading*, 9, Feb. 1976.

Smith, Nila Banton. *Reading Instruction for Today's Children*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.

Spolsky, Bernard. "The Limits of Language Education," *Linguistic Reporter*, 13, Summer 1971.

Spolsky, Bernard (ed.). *The Language Education of Minority Children. Selected Readings*. Massachusetts: Newbury House Publishers, Inc., 1972.

Torrey, Jane. "Second-Language Learning." In Carroll E. Reed (ed.). *The Learning of Language*. New York: Appleton-Century-Crofts, Meredith Corp., 1971.

"Villancico," *Philippines Quarterly*, 5:4, Dec. 1973.

Viloria, Nicolasa B. "A Study of the Reading Difficulties of Intermediate Pupils in the District of Sagay, Negros Occidental." Unpublished Master's thesis, University of the Visayas, Cebu City, 1971.

ACKNOWLEDGMENTS

Grateful acknowledgment is due the following:

To Dr. Bonifacio P. Sibayan, whose great interest in research and kind support inspired the investigators in the undertaking of this research;

To Dr. Edilberto P. Dagot, Prof. Lorna Z. Segovia, Dr. Avelina R. Luis, Dr. Fe T. Otanes, and Dr. Charity D. Santos, for their invaluable encouragement and kind assistance;

To the College Research Council, for the financial support granted the research project;

To Prof. Araceli M. Villamin and Prof. Alfonso O. Santiago, Advisers, for their expert advice and helpful guidance in the conduct of this study;

To the BPS-PNC Reading Scholars, 1975-1976, the PNCLES Grade Four Advisers — Mrs. Andrea T. Cortez, Mrs. Camila C. Gonzales, and Miss Adelaida V. Aguilar —, Dr. Ildefonso J. Cruz of the University of the Philippines, Miss Zenaida S. Masangkay, Miss Josefina S. Pano, Mrs. Aurora S. Manuel, Mrs. Placida F. Garcia, Miss Leonora L. Oriondo, Mrs. Perpetua U. Razon, and Miss Diana F. Sabarre, for their helpful suggestions and generous assistance;

To Prof. Benjamin M. Pascual, for editorial and graphic layout assistance; and

Finally, to all the others who have contributed to make this research possible.

The Authors

March 15, 1977

A NOTE ON THE NEW LOGO

A new and, it is felt, symbolically fitting publisher's logo appears for the first time with this occasional paper under the Philippine Normal College research series. The motif is that of an inscription upon a piece of bamboo.

Knowledge and learning among the many ethnic groups in the Philippines thrived during the pre-Hispanic phase of the country's history, even if the informal education given was of the most rudimentary sort calculated to promote group cohesiveness and conformity. It is, of course, regrettable that most of the inscribed materials, as manifestations of knowledge and learning, suffered total destruction with the coming of the Spaniards; for indeed these were evidences, impermanent as they were, of the practices of the people in the keeping of records, transmission of knowledge, and communication in some sort of written form.

The three ideographic characters in the logo stand for *da*, *na*, and *pa* in the ancient syllabary. They symbolize the initial letters of the name of the Philippine Normal College in Filipino: *D*alubhasaang *N*ormal ng *P*ilipinas. The bamboo represents one perishable material — others, tree barks and leaves — upon which the practicing natives incised characters with a sharp, wedge-shaped tool. It does seem strange that even at present some Mangyans in the southern part of Mindoro island and the Tagbanuas in Palawan island practise this form of writing art but with modified scripts.

Thus the logo is a contemporary symbol of the tradition of writing and learning that, from the matrices of the past up to the present, have become a continuum; this time, however, under the aegis of systematized education.